

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA
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STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-10-001

APPLICANT: City of San Buenaventura

AGENT: Travis Cullen, Envicom, Inc.

PROJECT LOCATION: San Buenaventura Beach, beginning just west of the Ventura Pier to east of Figueroa Street for a distance of about 1,850 linear feet.

PROJECT DESCRIPTION: Repair and replace 500 linear feet of the Ventura Promenade including replacement of "Beach Access Stairway Number 2", replacement of "Alcove F", and the repair of an 150 linear feet segment of an existing, approximately 1,850 linear ft. revetment by adding approximately 690 cubic yards of rock. No rock will be placed seaward of the existing toe of the revetment.

MOTION & RESOLUTION: Page 3

SUMMARY OF STAFF RECOMMENDATION: Staff recommends **approval** of the proposed development with conditions.

The City of San Buena Ventura proposes to conduct repair and replacement work along 500 linear feet of the Ventura promenade between Figueroa Street and the Ventura Pier which includes the replacement of "Beach Access Stairway Number 2", the replacement of "Alcove F", and the repair of a 150 linear feet segment of the existing 1,850 linear ft. revetment by adding 690 cubic yards of rock.

The purpose of the proposed development is to maintain and enhance existing public access and recreational facilities along the City's beach front. No construction is proposed after the Memorial Day holiday weekend or before the Labor Day holiday weekend in order to minimize potential temporary impacts to public beach access at the project site.

In this case, the existing segment of the promenade in the project area is subject to periodic wave attack and damage/deterioration over time. The existing promenade was constructed utilizing a slab-on-grade foundation between 1967 and 1970, prior to the

effective date of the Coastal Act. The existing 1,850 linear ft. rock revetment was constructed at the same time as the promenade the project site in order to protect the promenade from wave up-rush and erosion. The City has submitted a Wave Run-up Analysis, prepared by Noble Consultants, Inc., dated October, 2009, which indicates that the expected lifespan of the existing promenade and revetment is not expected to exceed another 50 years. In this case, the proposed project includes the minor repair of an approximately 150 linear ft. segment of this much larger revetment. The proposed minor repair is necessary to stabilize the portions of the promenade to be reconstructed (including Alcove F) and will not result in any significant extension of the lifespan of the much larger rock revetment and will not result in any new measurable impacts to shoreline sand supply and coastal processes.

The project site is located within the Commission's retained permit jurisdiction. While the City of San Buenaventura has a certified Local Coastal Program, the standard of review for the proposed project is the Chapter 3 policies of the Coastal Act.

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EXHIBITS

Exhibit 1.	Vicinity Map
Exhibit 2a.	Project Aerials
Exhibit 2b.	Project Aerials
Exhibit 3.	Site Plan
Exhibit 4.	Stair Plan
Exhibit 5.	Alcove Plan

LOCAL APPROVALS RECEIVED: Categorical Exemption, California Environmental Quality Act, dated December 14, 2009; Department of Fish & Game Environmental Filing Transmittal Memorandum/Filing Cash Receipt, California Department of Fish and Game, dated December 14, 2009; Section 401 water quality certification consistency, Department of the Army Corps of Engineers, dated March 4, 2010; Section 401 Water Quality Certification Application Form, California Regional Water Quality Control Board, December, 2009;

SUBSTANTIVE FILE DOCUMENTS: Certified San Buenaventura Local Coastal Program; "Preliminary Geotechnical Design Recommendations for Promenade Beach and Stair Improvement Project," prepared by Fugro West, Inc., dated October 15, 2009; "Final Report, Coastal Engineering Analysis, Promenade Beach and Stair Repair and Maintenance Project, Ventura California," prepared by Noble Consultants, Inc., dated October, 2009.

I. STAFF RECOMMENDATION

The staff recommends that the Commission adopt the following resolution:

MOTION: *I move that the Commission approve Coastal Development Permit No. 4-10-001 pursuant to the staff recommendation.*

STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE THE PERMIT:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

1. **Plans Conforming to Geotechnical Engineer's Recommendations**

By acceptance of this permit, the applicant agrees to comply with the recommendations contained in all of the geology, geotechnical, and/or soils reports referenced in the Substantive File Documents. These recommendations, including recommendations concerning foundations, disposal, and drainage, shall be incorporated into all final design and construction plans, which must be reviewed and approved by the consultant prior to commencement of development.

The final plans approved by the consultant shall be in substantial conformance with the plans approved by the Commission relative to construction, grading, and drainage. Any substantial changes in the proposed development approved by the Commission that may be required by the consultant shall require amendment(s) to the permit(s) or new Coastal Development Permit(s).

2. **Assumption of Risk, Waiver of Liability and Indemnity**

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from wave action, flooding, erosion and sea level rise; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its

officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

Prior to issuance of the Coastal Development Permit, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

3. Public Access – Construction Timing

By acceptance of this permit, the applicant acknowledges and agrees (i) that no construction shall take place during the peak visitor season and will only occur after the Labor Day holiday weekend and before the Memorial Day holiday weekend; (ii) that at no time will more than 50 percent of the pedestrian corridor be blocked by construction activities; (iii) that the replacement stairway shall be constructed prior to the removal of the existing stairway; and (iv) the construction staging area be confined to the area as proposed adjacent to the Ventura Pier.

4. Construction Responsibilities and Debris Removal

The applicant shall, by accepting this permit, agree and ensure that the project contractor shall comply with the following construction-related requirements:

- (a) No construction materials, debris, or waste shall be placed or stored where it may be subject to wave erosion and dispersion;
- (b) Any and all debris resulting from construction activities shall be removed from the beach prior to the end of each work day;
- (c) No machinery or mechanized equipment shall be allowed at any time within the active surf zone, except for that necessary to remove the errant rocks from the beach seaward of the revetment;
- (d) All excavated beach sand shall be redeposited on the beach.

Prior to issuance of the Coastal Development Permit, the applicant shall provide evidence to the Executive Director of the location of the disposal site for all excess excavated material from the site. If the disposal site is located in the Coastal Zone, the disposal site must have a valid coastal development permit for the disposal of fill material. If the disposal site does not have a coastal permit, such a permit will be required prior to the disposal of material.

5. Revetment Maintenance and Repair Program

By acceptance of this permit, the applicant acknowledges and agrees to the following:

- 1) No future repair or maintenance, enhancement, reinforcement, or any other activity affecting the rock revetment shall be undertaken if such activity extends

the seaward footprint of the subject shoreline protective device. Any debris, rock, or other materials which become dislodged after completion through weathering, wave action or settlement shall be removed from the beach or deposited on the revetment by the permittee on an as-needed basis as soon as feasible after discovery. No future repair or maintenance, enhancement, reinforcement, or any other activity affecting the rock revetment shall be undertaken without the benefit of a Coastal Development Permit.

- 2) Maintenance or repair work shall be completed incorporating all feasible Best Management practices. No machinery shall be allowed in the active surf zone at any time. The permittee shall remove from the beach any and all debris that results from the construction/repair work period.
- 3) No construction materials, debris, or waste shall be placed or stored where it may be subject to wave erosion and dispersion.
- 4) Any and all debris resulting from construction activities shall be removed from the beach prior to the end of each work day.
- 5) No machinery or mechanized equipment shall be allowed at any time within the active surf zone, except for that necessary to remove the errant rocks from the beach seaward of the revetment.
- 6) All excavated beach sand shall be redeposited on the beach.

6. Required Approvals

By acceptance of this permit, the applicant agrees to obtain all other necessary State or Federal permits that may be necessary for all aspects of the proposed project (including the California State Lands Commission and the U.S. Army Corps of Engineers) or evidence that no such approvals are required.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. PROJECT DESCRIPTION AND BACKGROUND

The applicant proposes to repair and replace portions of an approximately 500 linear foot section of the Ventura promenade including the replacement of "Beach Access Stairway Number 2", replacement of "Alcove F", and repair of 150 linear ft. section of an existing 1,850 linear ft. revetment by adding approximately 690 cubic yards of rock (**Exhibit 3**). No rock will be placed seaward of the existing toe of the revetment. The proposed placement of new and errant rock will be located entirely landward of the existing toe of the rock revetment.

The proposed project location is an approximately 500 linear ft. stretch of the existing Public Promenade at San Buenaventura Beach, between (up-coast) between the

Ventura Pier to the east (down-coast) Figueroa Street to the west (up-coast) (**Exhibit 2a**). The Ventura Promenade is a concrete pedestrian walkway that extends along the edge of the City's downtown shoreline between the first public road (East Harbor Boulevard) and/or the first line of structures and the sea and extends for a distance of approximately 1,850 linear feet. Located roughly between Figueroa Street and the Ventura pier, the combination concrete deck and rock revetment structure is one of the most significant public coastal access amenities within the City. The promenade was originally constructed, prior to the effective date of the Coastal Act, in two phases between 1967 and 1970 and consists of a rock revetment and a reinforced concrete pedestrian deck. The revetment section was constructed first to stabilize the shoreline at the time, protect the adjacent, landward development and provide a suitable foundation for the pedestrian walkway. The reinforced concrete deck includes designated paths for both pedestrian and bicycle users, beach access stairwells, and numerous benches and viewing areas. Specifically, the promenade includes nine cantilevered alcoves (Alcoves A – I) for bench seating and three beach stairs (Stairways 1 -3) that provide direct access to the beach. Elevated planters, lighting, and other landscape design features distributed along the promenade deck complete the design. In this case, the proposed project includes the replacement/renovation of both "Beach Access Stairway Number 2" and "Alcove F" which have been subject to substantial deterioration due to exposure to the elements overtime and are no longer safe for the public to use.

Adjacent development includes residential units, public and private parking, public open space, and the Crown Plaza hotel, which are located landward of the promenade (**Exhibit 2b**). Due to the geography of the area, the promenade is visible from the San Buenaventura Beach, the Ventura Pier, and select elevated locations in the northern downtown corridor.

The primary purpose of the proposed project is to maintain and enhance existing public access and recreational facilities along the City's beach front. Public access along the promenade will be temporarily impacted during the construction process; however, the City proposes to maintain public access along the promenade at all times during construction and at no time will more than 50-percent of the width of the pedestrian walkway within the project area be restricted. Lateral public access on the beach will be maintained, however the width of the access will be subject to the mean-high-tide-line at the time of construction. Construction activities associated with the proposed development would be initiated after Labor Day weekend and be completed prior to the following Memorial Day weekend. Construction equipment will be staged in the unpaved area between the south side of the Ventura pier and the paved parking lot to the south (**Exhibit 2**). Construction access to the promenade will be provided via the parking entrance to the same parking lot.

Over its lifetime, the promenade has been subject to wave attack from coastal storm events. The exposure to the harsh marine environment has resulted in the deterioration of the revetment, stairs, and concrete deck. Specifically, the City has informed staff that both the existing Alcove F and Stairway Number 2 have deteriorated to the point where public use of these areas is no longer safe. Thus, the proposed project is necessary to

maintain existing levels of public use along the promenade. Specifically, the proposed project includes the following three components:

Beach Access Stairway Replacement

“Beach Stairway Number 2” is located within a more narrow section of beach (**Exhibit 4**) and thus, is more exposed to wave attack, up-rush, and cobble abrasion than Stairways 1 and 3. The proposed project will result in the replacement of the concrete stairs with a new timber, pile-supported stairway consistent with the appearance of the nearby Ventura Pier. Timber used for the construction of the staircase will be treated with ammoniacal copper zinc arsenate; a common wood treatment for marine applications. The replacement stairway will be reconstructed in same general location as the existing stairway but will be reconstructed in a more landward configuration parallel to the promenade, rather than perpendicular to the promenade like the existing stairway. In this way, the new stairway will be located as far landward as feasible, reducing the frequency of wave impact.

Revetment Repair and Maintenance

The proposed repair and maintenance of the revetment will add rock to restore the armoring to the original design (**Exhibit 3**). In addition, errant rock which has migrated seaward from the existing revetment onto the sandy beach will be recaptured and restacked on the revetment as part of the proposed project. The applicant is proposing the addition of approximately 400 tons of armor rock along a relatively short 150 linear foot section (located immediately east of Alcove F) of the existing 1,850 linear ft. revetment; equal to approximately 690 cubic yards. The new armor rocks will be added on top of existing rock and will not extend further seaward than the existing rock revetment.

Alcove F Replacement

Alcove F serves as an important seating and viewing platform area for the public, providing a safe area for passive recreational use adjacent to the other areas of the promenade which are more actively used by pedestrians, joggers, and bicyclists (**Exhibit 5**). The concrete and rebar of Alcove F deteriorated over time and ultimately failed due to its location in the coastal environment. The cantilevered 8-inch thick concrete slab and aluminum guardrail will be rebuilt to match the pre-existing alcove design and restore the lost bench seating area. The restored alcove will match the original footprint deck area of approximately 275 square feet (55 feet long and 5 feet wide) and will not extend any further seaward than the existing structure.

B. HAZARDS AND SHORELINE PROCESSES

In regards to the new construction of shoreline protective devices that may alter natural shoreline processes, Section **30235** of the Coastal Act states:

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water

stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

In addition, Section **30253** of the Coastal Act states, in part, that new development shall:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

Section 30253 of the Coastal Act mandates that new development minimize risks to life and property in areas of high geologic and flood hazard. In addition, Coastal Act Section 30235 provides that shoreline protection devices shall be permitted only when all of the following four criteria are met: (1) there is an existing structure, public beach area, or coastal dependent use; (2) the existing structure, public beach area, or coastal dependent use is in danger from erosion; (3) shoreline-altering construction is required to protect the existing threatened structure or public beach area, or to serve the coastal dependent use; and (4) the required protection is designed to eliminate or mitigate its adverse impacts on shoreline sand supply.

The City of San Buenaventura is proposing public access improvements to the Ventura promenade by conducting repair and replacement work along a 500 linear ft. section of the promenade which includes the replacement of Beach Access Stairway Number 2, the replacement of Alcove F, and the repair of 150 linear ft. segment of an existing 1,850 linear ft. revetment by adding 690 cubic yards of rock (**Exhibits 2, 3, 4, & 5**). All new rock will be located landward of the existing toe of the revetment and will not encroach any further seaward.

The proposed development is located along a 500 linear ft. segment of the Ventura Promenade at San Buenaventura Beach, between the Ventura Pier to east (down-coast) and Figueroa Street to the west (up-coast) as generally shown on **Exhibits 1 & 2**. The promenade is located at the northern end of Pierpont Bay. The crenulated shaped bay experienced severe erosion in the early 1900s when the area was rapidly developed. Erosion conditions worsened until the 1960s when the Army Corps of Engineers constructed a series of groins approximately two miles down-coast that retained additional sediment within the littoral cell and resulted in a widened beach condition between Ventura Harbor and the Ventura Pier, successfully stabilizing the width of the shoreline along this section of the coast. Down-coast of the Ventura Pier, the beach begins to widen as the stabilizing effects of the first groin and the change in shoreline orientation become of greater influence.

1. Shoreline Protective Device Effects:

Coastal Act Section 30235 acknowledges that seawalls, revetments, groins and other such structural or “hard” methods designed to forestall erosion also alter natural landforms and natural shoreline processes. Accordingly, Section 30235 limits the

construction of shoreline protective works to those required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion. The Coastal Act provides these limitations because shoreline structures can have a variety of adverse impacts on coastal resources, including adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beach.

Shoreline protection devices also directly interfere with public access to tidelands by impeding the ambulatory nature of the mean high tide line (the boundary between public and private lands) during high tide and severe storm events, and potentially throughout the entire winter season. The impact of a shoreline protective device on public access is most evident on a beach where wave run-up and the mean high tide line are frequently observed in an extreme landward position during storm events and the winter season. As the shoreline retreats landward due to the natural process of erosion, the boundary between public and private land also retreats landward. Construction of rock revetments and seawalls to protect private property fixes a boundary on the beach and prevents any current or future migration of the shoreline and mean high tide line landward, thus eliminating the distance between the high water mark and low water mark. As the distance between the high water mark and low water mark becomes obsolete the seawall effectively eliminates lateral access opportunities along the beach as the entire area below the fixed high tide line is inundated. The ultimate result of a fixed tide line boundary (which would otherwise normally migrate and retreat landward, while maintaining a passable distance between the high water mark and low water mark overtime) is a reduction or elimination of the area of sandy beach available for public access and recreation.

Interference by shoreline protective devices can result in a number of adverse effects on the dynamic shoreline system and the public's beach ownership interests. First, changes in the shoreline profile, particularly changes in the slope of the profile which results from a reduced beach berm width, alter the usable area under public ownership. A beach that rests either temporarily or permanently at a steeper angle than under natural conditions will have less horizontal distance between the mean low water and mean high water lines. This reduces the area in which the public can pass on public land. The second effect on access is through a progressive loss of sand as shore material is not available to nourish the near-shore sand bar. The lack of an effective bar can allow such high wave energy on the shoreline that materials may be lost far offshore where it is no longer available to nourish the beach. This affects public access again through a loss of area between the mean high water line and the actual water. Third, shoreline protective devices such as revetments and bulkheads cumulatively affect shoreline sand supply and public access by causing accelerated and increased erosion on adjacent public beaches. This effect may not become clear until such devices are constructed individually along a shoreline and they reach a public beach. In addition, if a seasonal eroded beach condition occurs with greater frequency due to the placement of a shoreline protective device on the subject site, then the subject beach would also accrete at a slower rate. Fourth, if not sited landward in a location that ensures that the seawall is only acted upon during severe storm events, beach scour during the winter season will be accelerated because there is less beach area to dissipate the wave's energy.

2. Sea Level Rise

Sea level has been rising slightly for many years. As an example, in the Santa Monica Bay area, the historic rate of sea level rise, based on tide gauge records, has been 1.8 mm/yr. or about 7 inches per century¹. Recent satellite measurements have detected global sea level rise from 1993 to present of 3 mm/yr or a significant increase above the historic trend observed from tide gauges. Recent observations of sea level along parts of the California coast have shown some anomalous trends, however; there is a growing body of evidence that there has been a slight increase in global temperature and that an accelerated rate of sea level rise can be expected to accompany this increase in temperature. Sea level rise is expected to increase significantly throughout the 21st century and some coastal experts have indicated that sea level rise of 3 to 5 feet or more could occur by the year 2100.² Mean water level affects shoreline erosion in several ways and an increase in the average sea level will exacerbate all these conditions.

On the California coast the effect of a rise in sea level will be the landward migration of the intersection of the ocean with the shore. On a relatively flat beach, with a slope of 40:1, a simple geometric model of the coast indicated that every centimeter of sea level rise will result in a 40-centimeter landward movement of the ocean/beach interface. For fixed structures on the shoreline, such as a single family residence, pilings, or seawalls, an increase in sea level will increase the inundation of the structure. More of the structure will be inundated or underwater than are inundated now and the portions of the structure that are now underwater part of the time will be underwater more frequently.

Accompanying this rise in sea level will be increased wave heights and wave energy. Along much of the California coast, the bottom depth controls the near-shore wave heights, with bigger waves occurring in deeper water. Since wave energy increases with the square of the wave height, a small increase in wave height can cause a significant increase in wave energy and wave damage. Combined with the physical increase in water elevation, a small rise in sea level can expose previously protected back shore development to both inundation and wave attack, and those areas that are already exposed to wave attack will be exposed to more frequent wave attack with higher wave forces. Structures that are adequate for current storm conditions may not provide as much protection in the future.

3. Need for Shoreline Protection at the Project Site

¹ Lyles, S.D., L.E. Hickman and H.A. Debaugh (1988) *Sea Level Variations for the United States 1855 – 1986*. Rockville, MD: National Ocean Service.

² Cayan, D.R., M. Tyree, M. Dettinger, H. Hidalgo, T. Das, E. Maurer, P. Bromirski, N. Graham, and R.E. Flick, 2009. *Climate Change Scenarios and Sea Level Estimates for the California 2008 Climate Change Scenarios Assessment*, Draft Paper, CEC-500-2009-014-D, 62 pp, <http://www.energy.ca.gov/2009publications/CEC-500-2009-014/CEC-500-2009-014-D.pdf>.

Coastal Act Section 30235 acknowledges that seawalls, revetments, cliff retaining walls, groins and other such structural or “hard” methods designed to forestall erosion also alter natural landforms and natural shoreline processes. Accordingly, Section 30235 limits the construction of shoreline protective works to those required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion. The Coastal Act provides these limitations because shoreline structures can have a variety of negative impacts on coastal resources including adverse affects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beach.

In this case, the existing segment of the promenade in the project area is subject to periodic wave attack and damage/deterioration over time. The existing promenade was constructed utilizing a slab-on-grade foundation, prior to the effective date of the Coastal Act. An existing 1,850 linear ft. rock revetment was constructed at the same time as the promenade the project site between 1967 and 1970, in order to protect the promenade from wave up-rush and erosion. The City has submitted a Wave Run-up Analysis, prepared by Noble Consultants, Inc., dated October, 2009, which indicates that the expected lifespan of the existing promenade and revetment is not expected to exceed another 50 years. In this case, the proposed project includes the minor repair of an approximately 150 linear ft. segment of this much larger revetment. The proposed minor repair is necessary to stabilize the portions of the promenade to be reconstructed (including Alcove F) and will not result in any significant extension of the lifespan of the much larger rock revetment and will not result in any new measurable impacts to shoreline sand supply and coastal processes.

Moreover, in past permit actions, the Commission has found that rock revetments require relatively frequent repair and maintenance due to: (1) the natural settling or subsidence of the rock structure into the sand over time and (2) the inadvertent loss of rock material due to errant rock becoming dislodged from the structure and settling on the sandy beach seaward of the structure. This errant rock can adversely impact the public’s ability to utilize the sandy beach area seaward of a rock revetment over time. To ensure that errant rock that could adversely impact lateral public access along the sandy beach is retrieved in a timely manner, **Special Condition Four (4)** requires that any debris, rock, or other materials which become dislodged after completion through weathering, wave action or settlement shall be removed from the beach or deposited on the revetment by the permittee on an as-needed basis as soon as feasible after discovery. Additionally, **Special Condition Four (4)** requires the applicant to provide evidence to the Executive Director of the location and method of disposal of any excess excavated material to an approved disposal location.

Special Condition Five (5) requires that all maintenance or repair work incorporate all feasible Best Management practices and any future repair or maintenance, enhancement, reinforcement, or any other activity affecting the shoreline protective device shall require a coastal development permit. Additionally, any future improvements to the proposed revetment that might result in the seaward extension of the shoreline protection device would result in increased adverse effects to shoreline sand supply and public access.

The submitted geology, geotechnical, and/or soils reports referenced as Substantive File Documents conclude that the project site is suitable for the proposed project based on the evaluation of the site's geology in relation to the proposed development. The reports contain recommendations to be incorporated into the project plans to ensure the stability and geologic safety of the proposed project, the project site, and the adjacent properties. Thus, **Special Condition One (1)** is required to ensure stability and structural integrity and to protect the site and the surrounding sites. This condition requires the applicant to comply with the recommendations contained in the applicable reports, to incorporate those recommendations into all final design and construction plans, and to obtain the geotechnical consultant's approval of those plans prior to the commencement of construction.

Moreover, in regards to the proposed replacement of the stairway, the Wave Run-up Analysis, prepared by Noble Consultants, Inc., dated October, 2009, states that not only will the replacement of the deteriorated stairs with a new timber stair landing and stair flight have a smaller footprint on the beach than the existing stairway but, in addition, the narrow timber piles and more open cross section of the landing and stairs framing will serve to dissipate wave energy and reduce adverse wave down-rush effect. Consequently, the new replacement stairway is not expected to result in any significant localized beach scour or increased erosion. Additionally, the replacement of Alcove F, constructed above the wave up-rush limit, is also not expected to have effect upon the area's coastal processes. Thus, as proposed, the replacement of the existing public access stairway and the alcove area of the promenade have been designed in a manner that will ensure that any adverse effect to shoreline sand supply and coastal processes are minimized to the maximum extent feasible.

Although the conditions described above render the project sufficiently stable to satisfy the requirements of Section 30253, no project is wholly without risks. Due to the fact that the proposed project is located in an area subject to an extraordinary potential for damage or destruction from natural hazards, including wave up-rush and storm damage, those risks remain substantial here. If the applicant nevertheless chooses to proceed with the project, the Commission requires the applicant to assume the liability from these associated risks. Through the **Special Condition Two (2)**, the applicant acknowledges the nature of the geologic hazard that exists on the site and that may affect the safety of the proposed development.

Further, to ensure that the project complies with all other regulatory requirements, **Special Condition Six (6)** requires the applicant submit evidence to the Executive Director that all State and Federal permits necessary for the proposed project have been obtained.

Therefore, for the reasons set forth above, the Commission finds that, as conditioned, the proposed project is consistent with Sections 30235 and 30253 of the Coastal Act.

C. PUBLIC ACCESS, RECREATION, AND VIEWS

Coastal Act Section **30210** of the Coastal Act, as incorporated into the certified LCP states, in pertinent part, that new development shall:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Coastal Act Section **30212.5** states:

Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

Coastal Act Section **30213** states:

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Coastal Act Section **30223** states:

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Coastal Act Section **30252** states:

The location and amount of new development should maintain and enhance public access to the coast by...(6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

The Coastal Act mandates that maximum public access and recreational opportunities be provided and that development not interfere with the public's right to access the coast. Coastal Act Section 30210 mandates that maximum public access and recreational opportunities be provided and that development not interfere with the public's right to access the coast. Likewise, Section 30212 of the Coastal Act requires that public access to the sea be provided through new development projects. Section 30251 of the Coastal Act requires that the scenic and visual qualities of coastal areas be protected as a resource of public importance and that development be designed to protect views to and along the ocean and scenic coastal areas.

The primary purpose of the proposed project is to maintain and enhance existing public access and recreational facilities along the City's beach front. However, due to the nature of the proposed development, public access will be temporarily impacted along the beach front. The beach access stair replacement, revetment repair and maintenance, and alcove replacement all require temporary lateral closure of half of the promenade closest to the beach for the length of each project as well as a 50ft. buffer

on either side. The promenade will not be entirely closed at any time, only the width will be reduced during construction activities. Additionally, each component of the project will result in the restriction of approximately 100ft. of lateral beach access seaward of the promenade during construction activities to ensure public safety. Availability of lateral beach access will be determined by the location of the mean high tide line in front of each project at the time of construction. No construction is proposed during the peak tourism season (Memorial Day to Labor Day). Construction equipment will be staged in the unpaved area between the south side of the Ventura pier and the paved parking lot to the south (**Exhibit 2a**). Construction access to the promenade will be provided via the parking entrance to the same parking lot.

As proposed, the project has been designed to minimize temporary impacts to public access and recreation to the extent feasible, provided the proposed mitigation measures are adequately implemented. Thus, in order to ensure that the applicant's proposal to minimize potential adverse impacts are adequately implemented, **Special Condition Three (3)** requires the applicant acknowledges and agrees (i) that no construction shall take place during the peak visitor season and will only occur after the Labor Day holiday weekend and before the Memorial Day holiday weekend; (ii) that at no time will more than 50 percent of the pedestrian corridor be blocked by construction activities; (iii) that the replacement stairway shall be constructed prior to the removal of the existing stairway; and (iv) the construction staging area be confined to the area as proposed adjacent to the Ventura Pier..

In past permit actions, the Commission has found that rock revetments require relatively frequent repair and maintenance due to: (1) the natural settling or subsidence of the rock structure into the sand over time and (2) the inadvertent loss of rock material due to errant rock becoming dislodged from the structure and settling on the sandy beach seaward of the structure. This errant rock can adversely impact the public's ability to utilize the sandy beach area seaward of a rock revetment over time. To ensure that errant rock that could adversely impact lateral public access along the sandy beach is retrieved in a timely manner, **Special Condition Four (4)** requires that any debris, rock, or other materials which become dislodged after completion through weathering, wave action or settlement shall be removed from the beach or deposited on the revetment by the permittee on an as-needed basis as soon as feasible after discovery.

Additionally, to ensure that the proposed project does not result in new future adverse effects on shoreline sand supply and public access and that future impacts are reduced or eliminated, **Special Condition Five (5)** prohibits any future repair or maintenance, enhancement, reinforcement, or any other activity affecting the shoreline protective device approved pursuant to this permit, if such activity extends the seaward footprint of the subject shoreline protective device. Approval with this condition ensures maintenance and repair activities will not interfere with public access opportunities.

The Commission therefore finds that the proposed project, as conditioned, is consistent with Sections 30210, 30212.5, 30213, 30223, and 30252 of the Coastal Act.

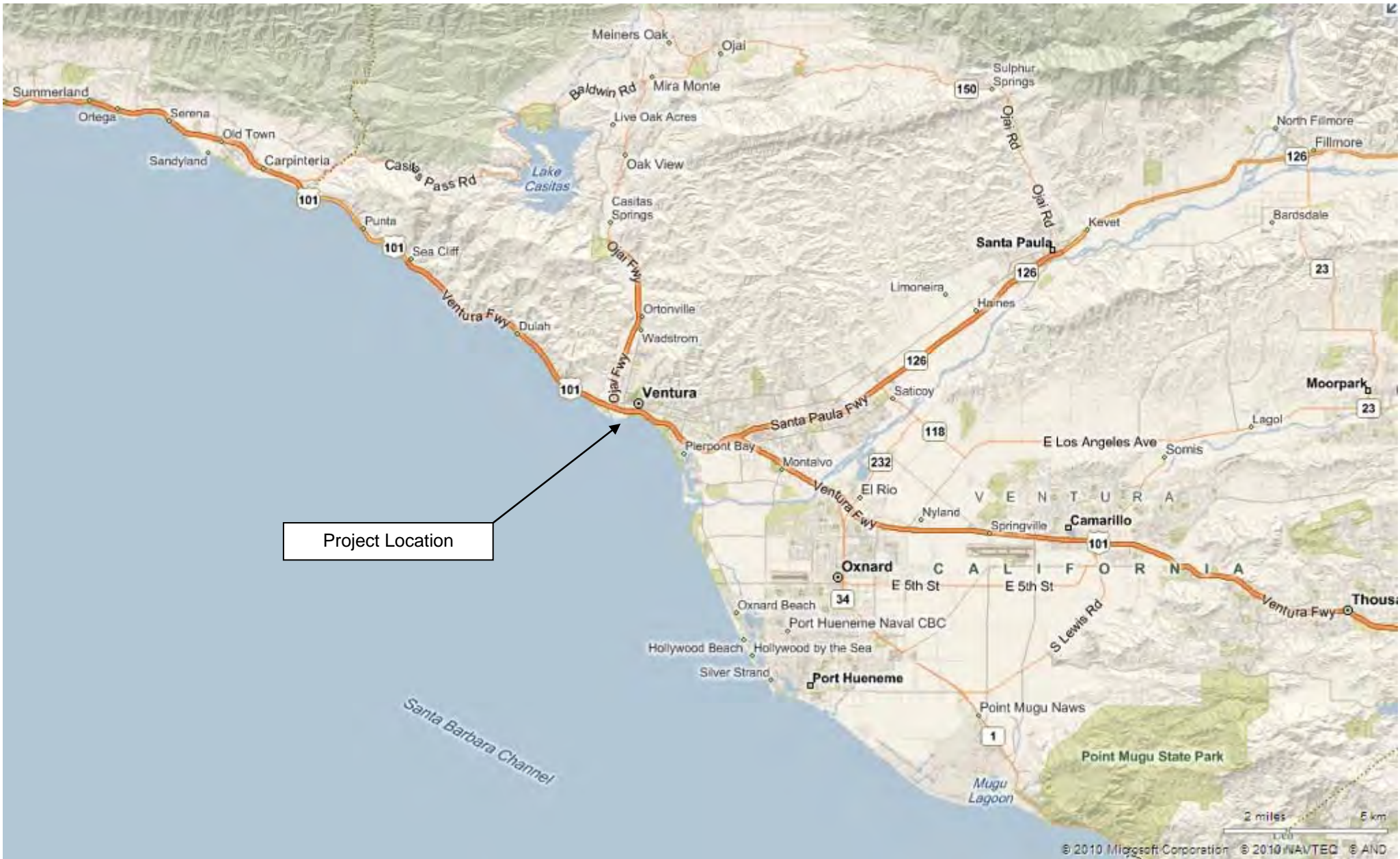
D. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed above, the proposed development, as conditioned, is consistent with the policies of the Coastal Act. Feasible mitigation measures, which will minimize all adverse environmental effects, have been required as special conditions. The following special conditions are required to assure the project's consistency with Section 13096 of the California Code of Regulations:

Special Conditions 1 through 6

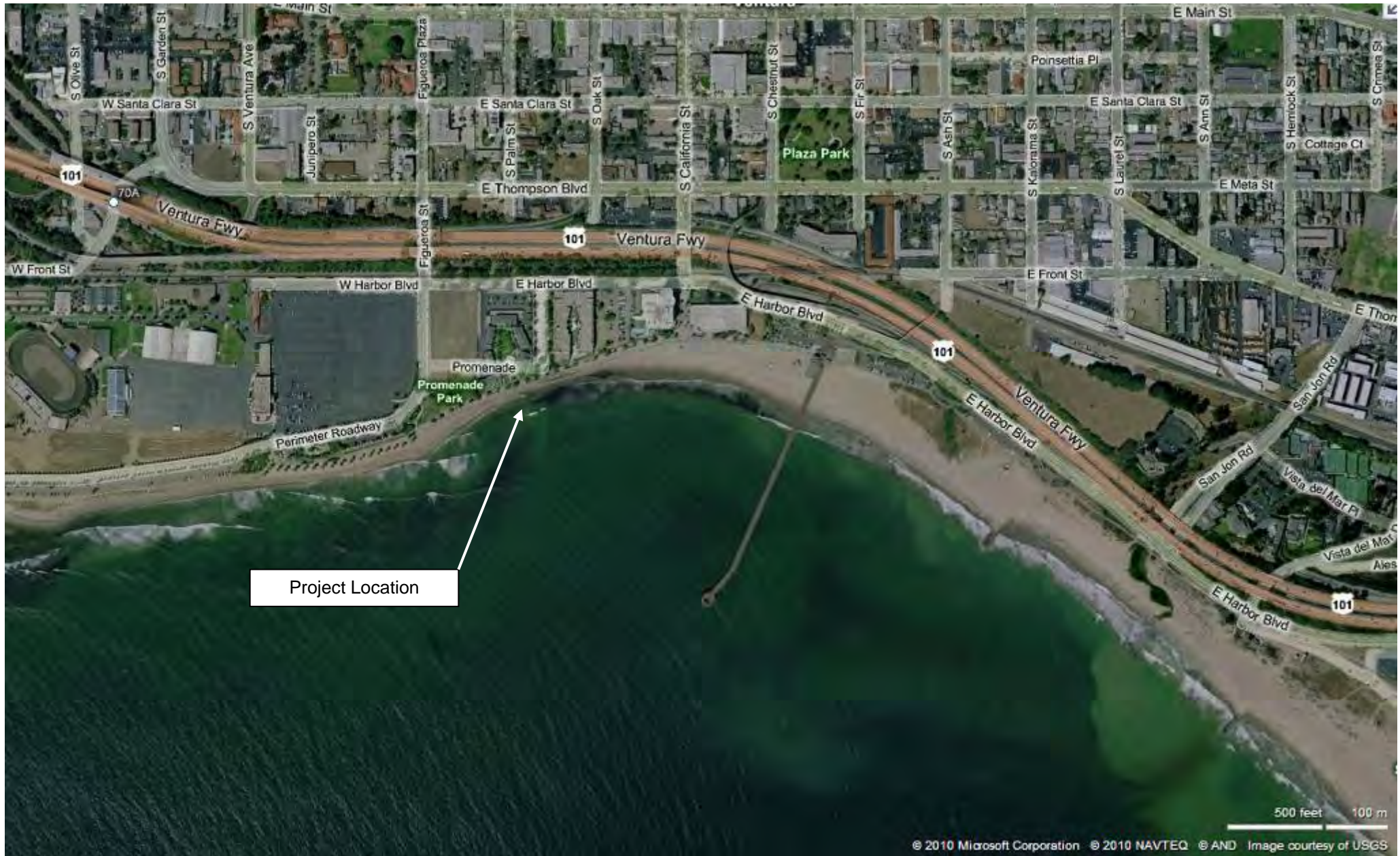
As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.



Project Location

© 2010 Microsoft Corporation © 2010 NAVTEC © AND

Exhibit No. 1
CDP 4-10-001
Vicinity Map

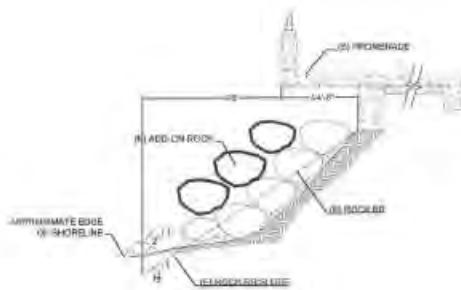


Project Location

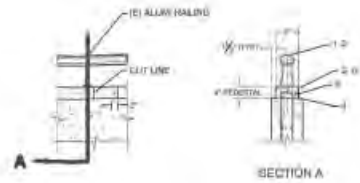
Exhibit No. 2a
CDP 4-10-001
Project Aerials



Exhibit No. 2b
CDP 4-10-001
Project Aerials



SECTION A
NOT TO SCALE

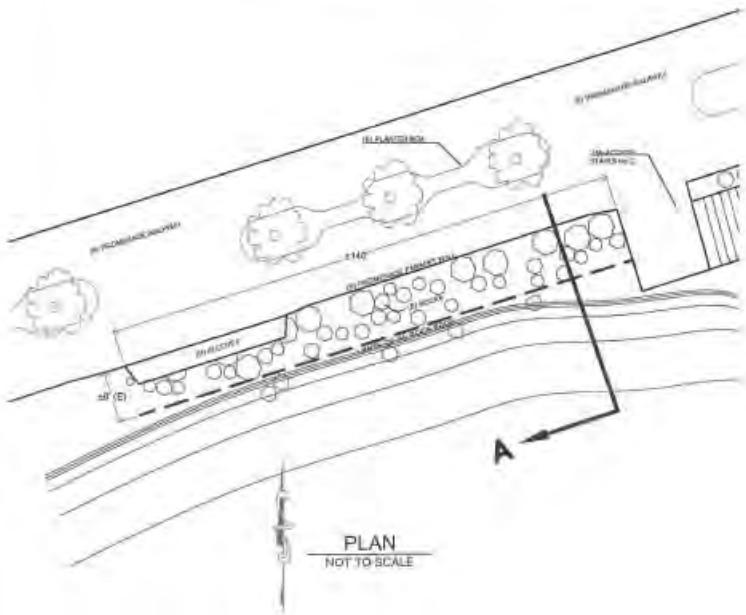


CONC. RAILING REPAIR DETAIL
NOT TO SCALE

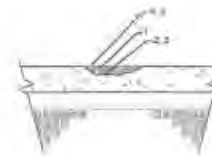
SCOPE OF WORK:

1. REMOVE, PROTECT AND STORE ALUMINUM RAILING
2. REMOVE RAILING AT JOINTS ONLY DO NOT CUT HORIZONTAL ALUMINUM RAILING
3. CUT AND REMOVE 4" HIGH CONC. FEDESTAL ONLY FRT/TOOT (E) REPAIR
4. CLEAN CONCRETE AND REPAIR SURFACE AND REMOVE ANY LOOSE MATERIAL
5. APPLY Sika ARIMATEC 110 EPOXY OR APPROVED EQUAL ON CONCRETE SURFACE AND AT EXPOSED REPAIR
6. USE SIKATOP 111 PLUS TO RESTORE THE 4" HIGH CONCRETE FEDESTAL
7. APPLY Sika FERROGUARD 303 OR APPROVED EQUAL TO SURFACE OF NEW CONCRETE FEDESTAL INCLUDING UP TO 12" BEYOND THE CONCRETE REPAIR LIMIT PRIOR TO RE-INSTALLING ALUMINUM RAILING.

NOTE:
REPAIR AREAS WILL BE INDICATED BY CITY STAFF PRIOR TO CONSTRUCTION



PLAN
NOT TO SCALE



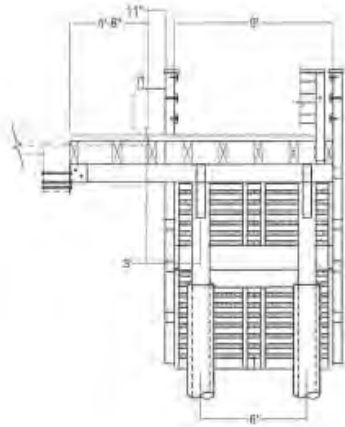
SLAB REPAIR DETAIL
NOT TO SCALE

SCOPE OF WORK:

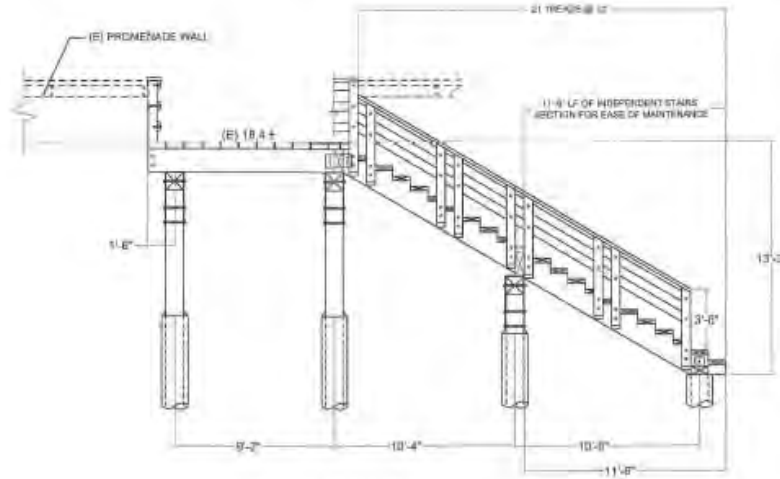
1. CLEAN AND PREPARE SPALL AREA THAT HAS BEEN CONTAMINATED WITH OIL, GREASE, DIRT OR FINE PARTICLES OF CONCRETE. USE WATER BLASTING OR EQUIVALENT MECHANICAL MEANS TO ACHIEVE A LANTANIDE AND CONTAMINANT FREE OPEN TEXTURED SURFACE.
2. APPLY Sika ARIMATEC 110, OR APPROVED EQUAL, ON EXPOSED SURFACE OF CONCRETE AND AT EXPOSED REPAIR.
3. PREPARE SURFACE OF CONCRETE AND APPLY A LAYER OF SIKATOP 112 PLUS, OR APPROVED EQUAL, TO FULL CONCRETE SPALLS.
4. RESTORE CONCRETE SURFACE TO MATCH EXPOSED ROCK SURFACE FINISH.
5. APPLY Sika FERROGUARD 303, OR APPROVED EQUAL TO AREAS SURROUNDING THE SLAB REPAIR UP TO 12" BEYOND THE CONCRETE REPAIR LIMIT.

NOTE:
REPAIR AREAS WILL BE INDICATED BY CITY STAFF WITH PRIOR TO CONSTRUCTION

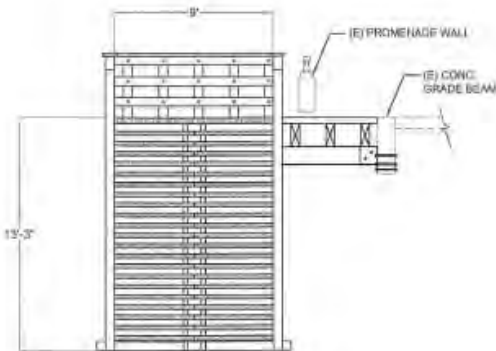
REV	DATE	BY	CHK
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION			
CITY OF SAN BUENAVENTURA			
PROMENADE BEACH AND STAIR IMPROVEMENTS			
ROCK REVETMENT REPLISHMENT AND DETAILS			
DATE: 03/27/2018	DATE: 03/27/2018	DATE: 03/27/2018	DATE: 03/27/2018
PROJECT NUMBER: 2018-01			
SHEET NUMBER: 001			
DATE: 03/27/2018			



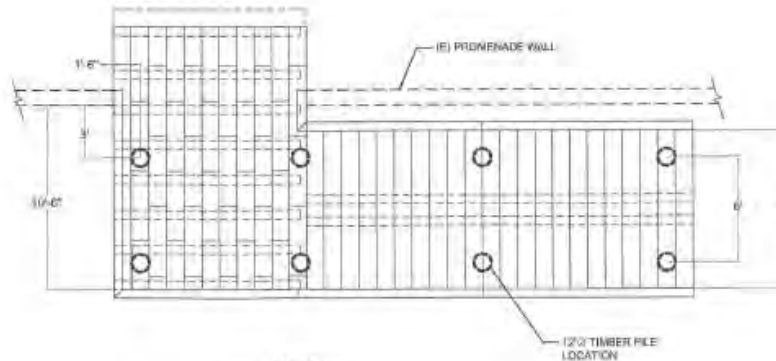
LEFT SIDE ELEVATION
NOT TO SCALE



FRONT ELEVATION
NOT TO SCALE



RIGHT SIDE ELEVATION
NOT TO SCALE



PLAN
NOT TO SCALE

ACCESS STAIRS NO. 2

NOT TO SCALE

CONSTRUCTION NOTES

- ALL TIMBER SHALL BE PRESERVE TREATED PER SPECIFICATION PRIOR TO INSTALLATION. OTHERWISE TWO COATS OF PRESERVATIVE TREATMENT SHALL BE APPLIED IN THE AFFECTED AREA PER SPECIFICATION.
- ALL TIMBER DIMENSIONS SHALL BE DOUBLE DIMENSION UNLESS ANOTHER DIMENSION IS SPECIFIED.

PILE CAP	NO. 1 BUSH
STEPWALL	NO. 1 S&B
STRONG FLOOR MEMBERS	NO. 1 S&B
POSTS	NO. 1 S&B
- TIMBER PILES SHALL BE DOUBLE DIMENSION UNLESS OTHERWISE SPECIFIED.

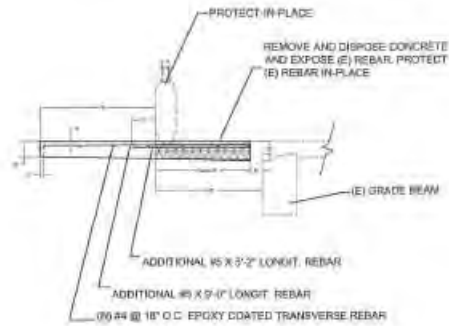
MINIMAL REQUIREMENTS	ASTM D 25 (STD SPEC FOR ROUND TIMBER PILES)
PRESERVATIVE TREATMENT	PT-BOND (AWPA C13 (TABLE 16-2))
ENGINEERING DESIGN PROCEDURE	ASTM D 2500 (DESIGN OF TIMBER PILES)
	NATIONAL DESIGN STANDARDS (NDS)
- IF PILE IS LARGER THAN PILE CAP, TRIM PILE AROUND TO MATCH WIDTH OF PILE CAP. APPLY TWO COATS OF PRESERVATIVE TREATMENT WITH WATERBORNE COPPER-CONTAINING GALT PRESERVATIVE FOLLOWED BY OXECROTE TO FIELD CUT AREAS. (WOOD HANDLING) (B) - CHAPTER 16, TABLE 16.3 PRESERVATIVE TREATMENT AND RETENTION NECESSARY TO PROTECT ROUND TIMBER PILES FROM SEVERE MARINE SCALER ATTACK.
- PILE CAP SHALL BE 1"x12" THICK LUMBER AND FASTENED ON THE PILE AS SHOWN IN DETAIL 3, SHEET 2.
- STRINGERS SHALL BE 6"x6" @ 2' O.C. AND SHALL BE CONNECTED TO PILE CAP AS SHOWN IN DETAIL 4.
- 4x12 WOOD BEAMS WITH 2" SPACING BETWEEN BEAM EDGES.
- WALL BRACKETS EVERY STRINGER IN PSP DECK BRIMS IN PRECASTED DECK.
- ALL METAL HARDWARE SHALL BE HOT DIPPED GALV. AND/OR STAINLESS STEEL.
- NOT DIPPED GALVANIZED MECHANICAL CONNECTORS MAY BE SUBSTITUTED WITH STAINLESS STEEL. ALLOW WITH THE APPROVAL OF THE ENGINEER.

NO.	DESCRIPTION	DATE	BY	CHKD.
CITY OF SAN BUENAVENTURA				
ENGINEERING DIVISION				
FROMENADE BEACH AND STAIR IMPROVEMENTS				
PLAN AND ELEVATIONS				
DATE	ISSUE	DATE	ISSUE	DATE
BY: [REDACTED]				
CHECKED: [REDACTED]				
DATE: [REDACTED]				
PROJECT NUMBER: [REDACTED]				
SHEET: [REDACTED] OF [REDACTED]				

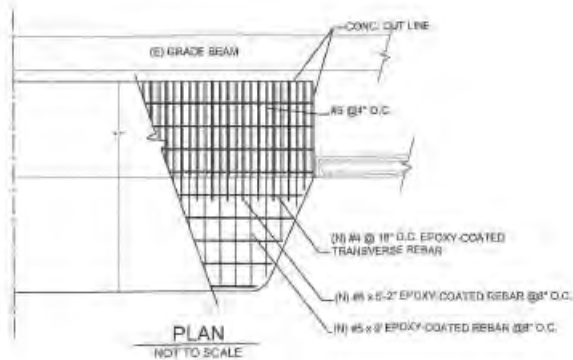
Exhibit No. 4
CDP 4-10-001
Stair Plan



ELEVATION
NOT TO SCALE



REBAR PLACEMENT
NOT TO SCALE



PLAN
NOT TO SCALE

CONSTRUCTION NOTES

1. CONCRETE CLASS SHALL BE READ-080.
2. ALL REBAR SHALL BE EPOXY COATED PRIOR TO INSTALLATION. APPLY 100% ARMORED EPOXY APPROX. EQUAL TO REBAR.
3. REBAR SHALL MATCH THE EXISTING ALCOVE REBAR. PROVIDE P.U. OR BRASS W/REBAR BY CONCRETE FOR BALDUS INSTALLATION TO PREVENT DIRECT CONTACT BETWEEN ALUMINUM REBAR AND CONCRETE.
4. APPLY FERROGRAD 803 OR APPROVED EQUAL ON RE CONCRETE AND 1" BEYOND THE LIMITS OF THE NEW CONCRETE.
5. THE ADDITIONAL #5 REBAR SHOWN HEREIN SHALL BE PLACED AT 12" SPACING AT 4" TO 6" FROM THE EXISTING REINFORCEMENT.
6. CONCRETE FINISH SHALL MATCH EXISTING ADJACENT STRUCTURE.
7. CONTRACT SHALL USE CONCRETE WOOD FORMS.
8. ALL METAL HARDWARE SHALL BE HOT DIPPED GALV. ANCHOR W/ WELDED END.
9. EPOXY COATED GALVANIZED MECHANICAL CONNECTIONS MAY BE SUBSTITUTED WITH STAINLESS STEEL ALLOY WITH THE APPROVAL OF THE ENGINEER.

NO.	REVISED	DATE	BY	APP.
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION CITY OF SAN BUENAVENTURA				
PROMENADE BEACH AND STAIR IMPROVEMENTS ALCOVE 'F' REPLACEMENT				
DATE	BY	DATE	BY	DATE
PRINCIPAL ENGINEER				
CITY ENGINEER				
PROJECT NUMBER				
PROJECT NUMBER				
PROJECT NUMBER				